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CLAIMS

10 1. Apparatus (1) for the anaerobic fermentation of ma-
terials (A, B) with

a pre-acidifier (2) in which said materials (A, B)
are subject to a pre-acidification,

15 a fermenter (3a, 3b) in which said pre-acidified ma-
terials (A, B) ferment, and

transport means (5a, 5b, 5c, 5d, 5e, 10, 11, 12, 14,
21) for transporting said materials (A, B) from said pre-
acidifier (2) into said fermenter (3a, 3b),

characterized in that

20 said transport means (5a, 5b, 5c, 5d, 5e, 10, 11,
12, 14, 21) are formed to selectively transport suffi-
ciently pre-acidified materials (A, B).

25 2. Apparatus (1) according to claim 1,

characterized in that

said transport means (5a, 5b, 5c, 14) comprise a
withdrawal device (5a, 5b, 5c) for the withdrawal from
the upper portion of said pre-acidifier (2), which are
preferably formed by a spillway of said pre-acidifier (2)
30 or by a withdrawal nozzle end arranged in the upper por-
tion of said pre-acidifier (2).

3. Apparatus (1) according to claim 2,
characterized in that
said transport means (5a, 5b, 5c, 14) comprise a
5 control device (14) for said withdrawal device, with
which said withdrawal device (5a, 5b, 5c) and preferably
an agitation device such as a stirrer (6, 7) can be
driven.

- 10 4. Apparatus (1) according to claim 1 or 2,
characterized in that
said transport means (5b, 12) comprise a sieve (12).

- 15 5. Apparatus (1) according to claim 1,
characterized in that
said transport means (5d, 5e, 10, 11, 14, 21) com-
prise a floatation device (10, 11, 21) and a withdrawal
device (5d, 5e) in the lower portion of said pre-
acidifier (2).

- 20 6. Apparatus (1) according to claim 5,
characterized in that
said transport means (5d, 5e, 10, 11, 14, 21) com-
prise a control device (14) for said withdrawal device
25 (5d, 5e) with which said withdrawal device (5d, 5e) and
preferably said floatation device (10, 11, 21) can be
driven.

- 30 7. Apparatus (1) according to one of the claims 1 to 6,
characterized in that
a mechanical pre-treatment-pre-hackling-device 25
for solubilizing/hackling at least part of said materials
(A, B) is provided.

8. Method for the anaerobic fermentation of materials (A, B) with

a pre-acidification at which said materials (A, B) are pre-acidified with a pre-acidifier (2),

5 a fermentation at which said pre-acidified materials (A, B) ferment in a fermenter (3a, 3b), and

a transport at which materials (A, B) from said pre-acidifier (2) are transported into said fermenter (3a, 3b),

10 characterized in that

said sufficiently pre-acidified materials are selectively transported.

9. Method according to claim 8,

15 characterized in that

the transport comprises letting said materials deposit themselves in said pre-acidifier (2) and a subsequent withdrawal of materials from an upper portion of said pre-acidifier (2).

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10. Method according to claim 8 or 9,

characterized in that

said materials are guided through a sieve (12) during the transport.

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11. Method according to claim 8,

characterized in that

the transport comprises a floatation and an at least partially simultaneous transport from the lower portion 30 of said pre-acidifier (2).

12. Method according to one of the claims 8 to 11,

characterized in that

said materials (A, B) comprise fluids (A) and solids 35 (B).

13. Method according to one of the claims 8 to 12,
characterized in that
at least part of said materials (A, B), particularly
5 said solids (B) are pre-treated preferably mechanically
pre-hackled before they are put into said pre-acidifier
(2).